College of Physicians & Surgeons Columbia University

50 Haven Avenue, New York 32 N.Y. 22 October 1945.

Dr. Cushing, Dept. Biology, Johns Hopkins University, Baltimore, Maryland.

My dear Dr. Cushing.

This letter is provoked by a paragraph in Dr. Emerson's paper in the 'Ann. Mo. Bot. Gard. 32:243 '45 Genethes as a tool for studying gens structure!, in which work of yours on the adaptation of Neurospora to sulfonamides is mentioned. I had begun a similar project, independently, in relation to the adaptation of the 1633, pab-less strain of N. crassa to pab synthesis. I had done very little with sulfonamides, and pending the completion of more direct aspects of pab-less adaptation, and further publication of your results, dropped that end of the investigation. Since, I have accumulated evidence that loci other than 1633 may mutate to pab-production, with quantitative differences in SA-resistance, indicating, probably, varying efficiency in pab production. Thus my interest in pas sulfa-resistant strains is renewed. There is good a priori evidence for the belief that such resistance is correlated with pab synthesis; if so I should like to compare the genes involved with those in my stocks. I learned from Prof. Emerson that you or he may or may not continue with this work; I would just as soon prepare resistant strains in our own laboratory (Dept. of Zoology, Columbia) but I did not wish to intrude on another project seriously under way, of which mention had already been made. Therefore, in addition to any information that you might care to give me, I would very much appreciate learning your plans and feelingson the matter.